surveys and limited coring/non-coring boreholes is cheaper and faster for certain formations but it is reported to be of lower reliability, compared to mix of surface surveys aad larger number of boreholes.

(c) to (e) Yes, Sir. Central Mine Planning and Design Institute (CMPDI) has already undertaken introduction of these exploration technologies in India.

Officials sent Abroad for Training

1853. SHRI PARMESHWAR KUMAR AGARWALLA: Will the Minister of COAL be pleased to state :

(a) how many technical/non-technical Personnel of Ministry of Coal/Corpo rations Departments therefor were sent abroad for training and visits during the 6th and 7th year Plans and in the years 1991-92, 1992-93 and 1993-94 (as on date) ;

(b) what were the fields of training in each case undergone and details of the type of work, done during such visits in each case ;

(c) how many technical personnel were actually posted after training in the job in which they were trained abroad ;

(d) whether it is a fact that some mining Engineers who were trained in Long Wall Faces were also posted for miscellaneous jobs away from work site; and

(e) if so, the details of each such case and the reasons of such posting ?

THE MINISTER OF STATE OF THE MINISTRY OF COAL (SHRI AJIT KUMAR PANJA) : (a) to (e) Information sought in the Question pertains to past 14 years. Such information is not compiled or maintained centrally. It is felt that the time and effort required to collect and compile the information sought may not be commensurate with the purpose sought to be achieved.

Coking Coal reserves in the country

1854. SHRI S. AUSTIN: Will the Minister of COAL be pleased to state :

(a) whether reserves of prime coking coal in the country have been estimated ; and

(b) the steps being taken to reach new coking coal bearing areas to meet the coun try's metallurgical demand and to curb imports ?

THE MINISTER OF STATE OF THE MINISTRY OF COAL (SHRI AJIT KUMAR PANJA) : (a) Yes, Sir.

(b) Some of the steps being taken to augment ind.'genous availability of coking coal, interalia, include :

(i) Increase in raw coking coal avail ability by reorganising existing mines and development of new mines ;

(ii) Increasing raw coal feed washeries by supplying low volatile medium coking coals of suitable quality;

(iii) Early commissioning of to new washeries under construction at Madhu-band and Kedla for increasing the existing washing capacity;

(iv) Modification of the existtng coking coal washeries to improve the capacity utilisation as well as the quality of washed coking coal;

(v) Cooking coal mines in Meghalaya and Assam are being identified to make available increased quantities of low ash coking coal.

Grade-wise production of Coal

1855. SHRI MURLIDHAR CHANDRA-KANT BHANDARE: Will the Minister of COAL be pleased to state :

(a) the grade-wise production of coal in the country during the last three years :

(b) how much of this coal is produced in underground mines and open cast mines ;

(c) whether the country has to import superior quality of coal;

(d) if so, the quality and value of such coal imported during the last three years; and

(e) the steps taken to improve the quality of coal in the country ?

THE MINISTER OF STATE OF THE MINISTRY OF COAL (SHRI AJIT KUMAR PANJA) : (a) Coal production in the country under broadly classified heads during last three years was as under :—

(million tonnes)

	1990-91	1991-92	1992-93 (Provisional)
Coking Coal :			
Steel & washery Grades	31.80	32.77	32.33
Others Grades	13.76	12.95	13.07
Non-Coking Coal :			
Grades A.B.C, and Assam Coal	67.37	72.14	75.37
Others Grades	98.80	111.42	117.49
TOTAL	211.73	229.28	238.36

(b) The information is given below:-

(million tonnes)

Year	Production from		
	Underground mines	Opencast mines	Total
1990-91	71.34	140.39	211.73
1991-92	73.49	155.79	229.28
1992-93 (Provisional)	74.90	163.36	238.26

(c) The country is self sufficient as regards non-coking coal. However some quantities of coking coal are being imported.

(d) Details of low ash coking coal imported by steel plants and value thereof during the last 3 years are given below:—

Year	Coking coi	al	Value on
1990-91	imports in milli	310T	
1991-92	tonnes	million US $FOB	324J
1992-93	5.72	1331.66	Rs. crores landed at
(Provisional)	6.08 6.71	port.	

; (e) Steps., taken *to* improve the coal quality include the following :

(i) Expediting development of on- going projects and openng of new mines for production of coal-grades required for steel etc.

(ii) Setting up of coal handling arrangements for supply of uniform quality of coal for power and other industries. .

(iii) Modification and modernisation of existing coking coal washeries. • -

(iv) Setting up of new washeries for washing of coking coals for use of steel plants.

(v) Setting up of coal benefication projects for supply of beneficiated coal for some of the distant power stations located more than 1000 Kms from coalfields.

Percentage increase in price, production and productivity of coal

1856. SHRI MURLIDHAR CHANDRAKANT BHANDARE : Will the Minister of COAL be pleased to state :

(a) the percentage increase in the prices of coal since the nationalisation of coal mines

(b) the percentage increase in the cost of production of coal during the above "period ;

(c) the percentage increase in the productivity of' coal during the above period ; and

(d) the details of steps taken by Government to increase the productivity of coal mining and specially the underground mining ?

THE MINISTER OF STATE OF THE MINISTRY OF COAL (SHRI AJIT KUMAR PANJA) : (a) to (c) Available information regarding prices, costs and productivity in respect of Coal India Ltd., its predecessor companies is furnished below *'*.—

	As on 1-4-1974 (A)	As on 31-12-1993 (B)	Increase (c) (C)	(C) as %of (A) (D)
1. Average Coal Price in Rs. per tonne	44.73	382.00	337.27	754
2. Average Cost of Production in Rs. per tonne	44.68	364.65 (Provisional)	319.97 (Provisional)	716.1
3. Productivity as output in tonnes per man shift.	0.58	1.39	0.81	139.6

(d) Important stepes taken by Coal Companies to increase; productivity include :—

(i) Improved manpower planning including redeployment of surplus workers and restricting the intake of new employees against vacancies caused by natural wastages. ...

(ii) Control on, increase in manpower through voluntary retirement scheme.

(iii) The concept of all men-all job is being tried on an experimental basis.

(iv) Improvement in the availability and utilisation of equipment by providing adequate workshop support, improved management of spares and timely rehabilitation of equipments.

(v) Increase in production and productivity with special emphasis on underground mines.

(vi) Systems and managerial improve ments to improve efficiency, "of operations tions.